

Center for Fisheries Research & Development - Gulf Coast Research Laboratory
University of Southern Mississippi
SEAMAP Summer Shrimp/Groundfish Survey, R/V Tommy Munro
Cruise 1102 – East Delta Stations

Introduction - The East Delta Summer Shrimp/Groundfish Survey cruise was conducted from June 2 through June 5, 2011. A total of 18 trawl stations were sampled following the revised trawl protocol of a 30-minute (bottom) tow time and no day/night designations for stations. Two SEAMAP plankton stations (B178 & B179) were also sampled during the cruise.

Objectives

- Conduct summer shrimp and groundfish survey in East Delta region at randomly-selected stations (locations of which are provided by NMFS) with standard SEAMAP 40-ft trawls to collect information on shrimp and groundfish abundance and distribution.
- Process all species (identified to the species level) collected by 40-ft trawl using the FSCS software for total number and total weight. Process individual lengths and weights, sampled (or sub-sampled) by species, using FSCS software according to the SEAMAP Operations Manual.
- Collect information on physical-chemical and environmental parameters in conjunction with trawl sampling and process those using SCS software.
- Submit data to the Gulf States Marine Fisheries commission/NMFS Data Manager.

Methods - All trawl samples were collected aboard the *R/V Tommy Munro*. A 40 ft. trawl with 1.58 inch stretched mesh was lowered into position at selected stations, and the towline was set at a 3.5:1 cable length to water depth ratio. Trawling was conducted at or near 3 knots for a period of 30 minutes after lockdown. Sample and data processing was conducted in accordance with the SEAMAP Operations Manual. Data were entered using the Fisheries Scientific Computer System. Environmental data were collected in conjunction with each trawl. Temperature, dissolved oxygen, and salinity values were measured and recorded, along with meteorological conditions.

Results – An expanded total of 1,495 kg of biota was collected in 18 trawl samples. Time, location and depth are presented in Table 1 and overall catch data are given in Tables 2 and 3. All data are on file with the Gulf States Marine Fisheries Commission.

Deviations - There were no deviations from standard SEAMAP protocol.

Cruise Participants - USM/GCRL/CFRD

Submitted By:



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Table 1. Time, location and depth data for 40-ft trawl samples collected aboard R/V Tommy Munro, SEAMAP Cruise Number 1102 – East Delta, June 2-5, 2011.

SEAMAP Station	Start Date / Time	Start Latitude	Start Longitude	Start Depth (fathoms)	Tow Time (min)
E1108	6/3/2011 11:37	2942.71	8806.85	20	30.12
E1008	6/3/2011 16:13	2929.88	8733.69	35	30.17
E1115	6/3/2011 20:34	2916.34	8809.72	6	30.23
E1116	6/3/2011 23:15	2915.06	8817.13	49	30.02
E1114	6/4/2011 2:11	2927.17	8815.93	28	29.77
E1113	6/4/2011 7:11	2930.03	8836.54	21	30.52
E1112	6/4/2011 10:50	2934.91	8850.68	7	30.05
E1109	6/4/2011 13:04	2941.14	8840.41	11	30.07
E1110	6/4/2011 15:42	2940.06	8821.90	21	30.30
E1111	6/4/2011 17:38	2938.78	8813.36	21	30.03
E1007	6/4/2011 21:27	2954.05	8753.24	17	30.45
E1106	6/4/2011 23:43	2955.83	8808.40	16	29.97
E1107	6/5/2011 2:05	2953.47	8825.74	17	30.03
E1105	6/5/2011 4:53	3003.67	8827.34	11	30.07
E1101	6/5/2011 7:34	3011.61	8816.21	7	30.32
E1104	6/5/2011 10:28	3005.24	8838.22	9	30.13
E1103	6/5/2011 11:29	3006.80	8838.10	8	30.02
E1102	6/5/2011 13:11	3011.09	8838.25	7	30.07

Table 2. Total catch weight (kg) for SEAMAP Cruise Number 1102 – East Delta, June 2-5, 2011.

SEAMAP Station	"Finfish" Total	"Crustacean" Total	"Other" Total	Total Catch
E1108	12.02	0.02	1.57	13.60
E1008	5.68	0.03	0.05	5.76
E1115	19.65	0.00	7.96	27.61
E1116	646.81	2.19	0.00	649.00
E1114	161.82	3.79	4.53	170.14
E1113	126.44	4.86	0.00	131.30
E1112	1.52	0.03	2.46	4.01
E1109	4.89	0.08	0.24	5.21
E1110	83.90	1.49	0.11	85.50
E1111	32.55	0.00	1.40	33.95
E1007	47.53	0.00	2.45	49.98
E1106	177.59	0.09	0.65	178.33
E1107	32.13	3.84	0.10	36.08
E1105	0.82	0.90	0.02	1.74
E1101	18.97	3.75	0.00	22.73
E1104	37.91	4.31	3.32	45.54
E1103	30.97	0.34	2.81	34.12
E1102	0.26	0.18	0.06	0.50
Survey Total	1441.46	25.90	27.73	1495.08

Table 3. Dominant species collected by number (A) and weight (B) in 40-ft trawls aboard *R/V Tommy Munro*, SEAMAP Cruise Number 1102 – East Delta, June 2-5, 2011.

A. Dominant Species by Total Number

SPECIES	TOTAL NO.
<i>STENOTOMUS CAPRINUS</i>	6877
<i>TRACHURUS LATHAMI</i>	4688
<i>MICROPOGONIAS UNDULATUS</i>	4631
<i>PEPRILUS BURTI</i>	3910
<i>LEIOSTOMUS XANTHURUS</i>	2835
<i>LOLIGO PLEII</i>	879
<i>LOLIGO PEALEII</i>	794
<i>SHRIMP-BROWN FEMALE</i>	418
<i>SAURIDA BRASILIENSIS</i>	377
<i>SHRIMP-BROWN MALE</i>	367
<i>PORTUNUS SPINICARPUS</i>	346
<i>TRICHIURUS LEPTURUS</i>	249
<i>ANCHOA HEPSETUS</i>	247
<i>PRIONOTUS LONGISPINOSUS</i>	243
<i>SQUILLA EMPUSA</i>	235
<i>ANCHOA LYOLEPIS</i>	207

B. Dominant Species by Total Weight (kg)

SPECIES	TOTAL WT.
<i>MICROPOGONIAS UNDULATUS</i>	438.80
<i>LEIOSTOMUS XANTHURUS</i>	321.68
<i>STENOTOMUS CAPRINUS</i>	274.24
<i>PEPRILUS BURTI</i>	152.53
<i>TRACHURUS LATHAMI</i>	69.00
<i>SYNODUS FOETENS</i>	20.83
<i>LAGODON RHOMBOIDES</i>	20.71
<i>PRIONOTUS LONGISPINOSUS</i>	14.85
<i>STELLIFER LANCEOLATUS</i>	14.62
<i>CALAMUS LEUCOSTEUS</i>	14.50
<i>PRISTIPOMOIDES AQUILONARIS</i>	14.28
<i>LOLIGO PEALEII</i>	11.47
<i>TRICHIURUS LEPTURUS</i>	11.00
<i>CYNOSCION ARENARIUS</i>	10.08
<i>LOLIGO PLEII</i>	9.69
<i>CENTROPRISTIS PHILADELPHICUS</i>	7.96